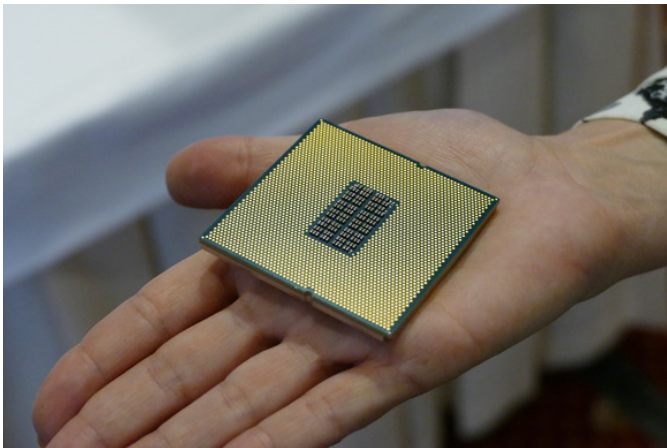**Qualcomm Takes on Server Hardware**

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Qualcomm presents an ARM-based datacentre system on a chip (SoC)-- a vigintiquattuor-core (24-core) number designed for hyper-scale applications such as IaaS, PaaS, big data and machine learning.

The SoC is built in collaboration with network chip company Mellanox and programmable chip maker Xilinx, and is the result of 2 years of work on what will ultimately be a complete server platform. Seen in pre-production form, the initial version has 24 cores, but the maker says the final version will have even more.

The cores are based on the ARM v8-A instruction set. Being 64-bit the SoC can run Linux, KVM virtualisation, OpenStack DevStack for OpenStack cloud orchestration, guest VMs running a standard Linux distribution, Apache web web server and WordPress.

In turn Mellanox is working on network cards compatible with the SoC, while Xilinx plans FPGAs to accelerate particular workloads.

Qualcomm is not the only company working on ARM-based server chips-- AMD, Cavium, AppliedMicro, Marvell and Broadcom already have such products on the market, while Intel offers a low-power alternative with the Xeon lineup.

Go [Qualcomm Technologies Announces New Specs for ARM-Based Datacentre SoC](#)